

REMARKS

Claims 29-42, 52 and 56 are currently pending and under consideration.

Status of Application

The present Response and Amendment is submitted in response to the Office Action mailed February 6, 2004 (Paper No. 20040127), and the supplemental Office Action mailed April 2, 2004 (Paper No. 20040331). This communication accompanies an RCE to reopen prosecution after a final decision by the BPAI.

This Response and Amendment includes amendment of the claims in accordance with the decision of the BPAI, as well as the Examiner's Answer of December 27, 2006 ("Examiner's Answer"), in which the Examiner withdrew a number of rejections under 35 U.S.C. § 112, first and second paragraphs, based on Applicants' Appeal brief. All outstanding rejections are addressed by Applicants herein.

Rejection of the claims pursuant to 35 U.S.C. § 112, first paragraph

The Examiner rejected claims 29, 31-42, 52 and 56 under 35 U.S.C. § 112, first paragraph, as allegedly lacking adequate enablement for the element of "complexing agent."

The Examiner subsequently withdrew this ground of rejection in the Examiner's Answer. Applicants thank the Examiner, and respectfully submit that the enablement rejection has therefore been rendered moot.

Rejection of the claims pursuant to 35 U.S.C. § 112, second paragraph

Claims 29-42, 52 and 56 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which Applicants regard as the invention.

As a preliminary matter, Applicants note that the Examiner withdrew indefiniteness rejections related to the terms "raw algae material", "highly-purified", "complex-forming agent", "fresh algae material", and "organ and tissue parts" in the Examiner's Answer. Applicants thank the Examiner, and respectfully submit that the indefiniteness rejections on these bases have therefore been rendered moot.

The Examiner maintained the indefiniteness rejections as follows.

In the Examiner's view, the terms "the extracting" and "the extraction" in claims 30-32 do not have sufficient antecedent basis. Applicants have amended claims 30-32 to recite "said treating", which term is present in claim 29, from which claims 30-32 depend. Accordingly, Applicants submit that the Examiner's rejection of claims 30-32 has been overcome, and request reconsideration and withdrawal of the rejection.

In the Examiner's view, the term "a complex" should more correctly be "the complex" in claim 30. Applicants have made the suggested correction to claim 30, and therefore submit that the Examiner's rejection of claim 30 has been overcome, and request reconsideration and withdrawal of the rejection.

In the Examiner's view, the term "soda solution" in claim 31 is uncertain. While not necessarily in agreement with the Examiner's basis for rejection, Applicants nonetheless have amended claim 31 to delete the term "soda" and have added a specific recitation of the term " Na_2CO_3 ." Support for this amendment can be found in the specification at page 7, line 24, and page 13, at lines 17 and 25. Accordingly, Applicants submit that the Examiner's rejection of claim 31 has been overcome, and request reconsideration and withdrawal of the rejection.

In the Examiner's view, the phrase "on the basis of" is unclear in claim 34, and should be replaced with the phrase "formed from." Applicants have made this suggested amendment to claim 34, and accordingly, Applicants submit that the Examiner's rejection of claim 34 has been overcome, and request reconsideration and withdrawal of the rejection.

In the Examiner's view, the phrase "recycling materials from regenerated raw materials" is indefinite in claim 34. Applicants have deleted this phrase from claim 34, and accordingly, Applicants submit that the Examiner's rejection of claim 34 on this basis has been overcome, and request reconsideration and withdrawal of the rejection.

In the Examiner's view, the term "deep filters" is unclear in claim 35. Applicants have deleted this term from the claim, and have amended claim 35 to recite a filter "having a pore size of approximately 15 μm ". Support for this amendment can be found in the specification on page 14, at lines 6-9. Accordingly, Applicants submit that

the Examiner's rejection of claim 35 has been overcome, and request reconsideration and withdrawal of the rejection.

Applicants respectfully submit that all of the Examiner's outstanding rejections under 35 U.S.C. § 112, second paragraph, have either been overcome or rendered moot. No new matter was added by way of these amendments.

Rejection of the claims under 35 U.S.C. § 103(a)

The Examiner has maintained the rejection of claims 29-42, 52 and 56 under 35 U.S.C. § 103(a) as being unpatentable over Klöck, et. al. (AP) ("Klöck") (Appl. Microbiol. Biotechnology vol. 40, 1994, pages 638 ff.) in view of Nevins, et. al., (US 4,954,447), and Yeh (US 5,489,674), and if necessary in view of Zimmermann, et. al. (DE 42 04 012 A1).

While not necessarily in agreement with the Examiner's reasoning, but rather, in a good-faith effort to expedite prosecution, Applicants have amended claim 29, from which all of remaining claims 30-42, 52 and 56 depend. Claim 29 was amended to delete reference to "raw algae" material, and to include reference to the algae source material as being selected from the group consisting of fresh algae and dried algae, further wherein the source material has not been previously processed. Applicants respectfully submit that amended claim 29, and dependent claims 30-42, 52 and 56, are not obvious over Klöck, in view of Nevins and Yeh, and additionally in view of Zimmermann.

The test which must be met for a reference or a combination of references to establish obviousness has not been satisfied in the instant matter. The MPEP states, in relevant part, the proper test for obviousness:

Office policy is to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103... [T]he four factual inquiries enunciated therein as a background for determining obviousness are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations. MPEP § 2141.

Additionally, MPEP § 2143.01 provides: “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).” (emphasis added).

None of these criteria have been met here.

The Examiner states repeatedly that Klöck teaches only a purification procedure starting with commercial alginate (see, e.g., pages 5 and 11 of the Examiner's Answer, as well as pages 6-7 of the February 6, 2004, Office Action), and equates the alginate starting material disclosed by Klöck with the scope of the term "raw alginates" as used by Applicants in the instant application. Specifically, the Examiner contends that "raw alginates" may encompass the commercial alginates of Klöck.

In the instant application, Applicants distinguish both fresh and dried algae from commercially-available alginates. "Commercial" alginates have undergone some form of processing (see, e.g., specification from page 3, line 36, through page 4, line 4). The Examiner also acknowledges this distinction (see, e.g., first paragraph on page 11 of Examiner's Answer).

As amended, claim 29 does not encompass a "commercial" alginate starting material. Furthermore, because Applicants teach that it is known in the art that purification processes applicable to commercial alginates are not typically applicable to fresh or dried algae, further evidenced in the Declaration of Dr. Frank Thürmer submitted previously by Applicants, Applicants submit that the combination of references cited by the Examiner provides no suggestion for the skilled artisan to arrive at the presently-claimed invention.

Because none of Klöck, Nevins, Yeh, and Zimmerman teach or suggest the invention set forth in amended claim 29, neither alone, nor when taken collectively, Applicants respectfully submit that amended claim 29, and dependent claims 30-42, 52 and 56, are not obvious over Klöck, in view of Nevins and Yeh, and additionally in view of Zimmermann. Accordingly, Applicants respectfully request reconsideration and withdrawal of the obviousness rejection.

Summary

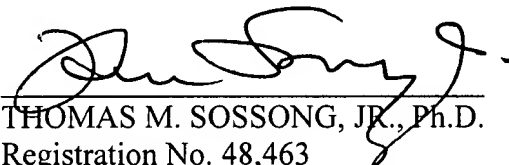
Applicants respectfully submit that the pending claims, including the amended claims, are fully supported in the specification as filed, and that no new matter has been added by way of the present Amendment and Response.

Favorable examination and allowance of the claims is hereby requested. If the Examiner believes that a discussion with the undersigned would be helpful to understand anything set forth herein, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,
ULRICH ZIMMERMANN, et al.

11 - SEP - 2007

Date


THOMAS M. SOSSONG, JR., Ph.D.
Registration No. 48,463
DRINKER BIDDLE & REATH LLP
One Logan Square
18th and Cherry Streets
Philadelphia, PA 19103-6996
Tel: (215) 988.2562
Fax: (215) 988.2757
Attorney for Applicants